



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/470,645 | 12/22/1999 | NICK N. NIKOLS | 26530.6 | 6402 |

27683 7590 03/15/2004

HAYNES AND BOONE, LLP
901 MAIN STREET, SUITE 3100
DALLAS, TX 75202

EXAMINER

CAO, DIEM K

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

2126

DATE MAILED: 03/15/2004

15

Please find below and/or attached an Office communication concerning this application or proceeding.

ppg

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/470,645 | NIKOLS ET AL. | |
| | Examiner | Art Unit | |
| | Diem K Cao | 2126 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7,9-11,13,15,18-20 and 22-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7,9-11,13,15,18-20 and 22-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is in response to the Amendment filed on 12/29/2003.
2. Claims 7, 9-11, 13, 15, 18-20 and 22-25 remain in the application. Applicant has amended claims 7, 9-10, 15, 18 and 23.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 7 recites the limitation "XML data" in page 3, line 5 and line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2126

6. Claims 15, 18-20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meltzer et al. (U.S. 6,125,391) in view of Harrison et al. (U.S. 6,622,170 B1).

7. **As to claim 15**, Meltzer teaches receiving an event from an application (input document is received at the network interface from an originating participant node; col. 83, lines 29-44) prior to receiving event data from the server (the output document is sent to a participant node; col. 83, lines 29-44), converting the event into markup language data (all the document received in non-XML syntaxes are translated into XML; col. 84, lines 16-33), transforming the event to a predetermined format by a transformation processor (the XML documents are passed to the processor 1502 which translates them into the JAVA format; col. 84, lines 45-47), the predetermined format being responsive to the server (the document is translated to the format of the host, for example XML to JAVA; col. 83, lines 29-44), providing a transformation profile to the transformation processor (BID data; col. 84, lines 33- 63 and XSL style sheet; col. 81, lines 24-43), the transformation profile including formatting instructions for transforming the markup language data to the predetermined format (translation rules for translating ... compiling the BID data; col. 84, lines 33-63), and transmitting the transformed event to the server (document service, back end system; col. 84, lines 50-67).

8. However, Meltzer does not teach a distributed directory, Meltzer teaches the market maker server node functions as a distributed directory (The market maker is a server ... legacy systems; col. 82, lines 58-67). Harrison teaches a distributed directory (LDAP server 20; col. 6, lines 40-58, and the directory itself can be centralized or distributed; col. 1, line 65 – col. 2, line

Art Unit: 2126

13), wherein a first portion and a second portion of the distributed directory are located in a first partition and a second partition, respectively (If the directory is distributed ... non-overlapping subset of the information), a mechanism to enable clients to read information from a server directory while another client is attempting to update information (col. 3, lines 29-32).

9. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Meltzer and Harrison because it improves the communication in the distributed directory and clients.

10. **As to claim 18**, Meltzer teaches a first processor (market maker 15 node, computer, processor; col. 9, lines 9- 44) connected to a network (internet 19; col. 9, lines 9-44) for executing computer code (computer program; col. 9, lines 9-44), a second processor (market participant 12, computer, processor; col. 9, lines 9-44) connected to the network (internet 19; col. 9, lines 9-44) for executing computer code (computer program; col. 9, lines 9-44), a first memory connected to the first processor (memory; col. 9, lines 9-44), a second memory connected to the second processor (memory; col. 9, lines 9-44), a market maker, a portion of which being stored in the first memory (the market maker nodes include ... BID registry; col. 9, lines 35-37), an application (market participants), a portion of which being stored in the second memory (market participants include resources ... to be traded; col. 9, lines 29-34), a first transformation profile for defining a first predetermined format for use by the distributed directory (BID data; col. 84, lines 33- 63 and XSL style sheet; col. 81, lines 24-43), a second transformation profile for defining a second predetermined format for use by the application (XSL style sheet; col. 81, lines

Art Unit: 2126

24-43), software for detecting a directory event in the distributed directory (the router 1104, participant registry, document filter, listeners; col. 82, lines 26-50 and event listener; col. 10, lines 46-65 and Fig. 11), software for detecting an application event in the application prior to detecting the directory event (event listeners; col. 26, lines 40-57), software for transforming the application event to the first predetermined format by using a generic transformation tool and the first transformation profile (A business interface definition compiler ... into the JAVA format; col. 84, lines 38-47), software for providing the transformed application event to the market maker server (document router 1503, event listener, document service; col. 84, lines 47-67), software for transforming the market maker server event to the predetermined format by using a generic transformation tool and the transformation profile (translator 1103; col. 82, lines 51-57, the output data of the service is converted to the document format; col. 83, lines 29-44, compiler BIDC 1507; col. 84, lines 34-67), software for providing the transformed market maker server event to the application (router 1104; col. 82, lines 40-57), whereby the market maker server becomes aware of the application event by having the application event provided to the market maker server in a transformed state (receipt input document in java format; col. 84, lines 16-67) and whereby the application becomes aware of the market maker server event by having the market maker server event provided to the application in a transformed state (the output .. sent to a participant node; col. 83, lines 29-44).

11. However, Meltzer does not teach a distributed directory, Meltzer teaches the market maker server node functions as a distributed directory (The market maker is a server ... legacy systems; col. 82, lines 58-67). Harrison teaches a distributed directory (LDAP server 20; col. 6,

Art Unit: 2126

lines 40-58, and the directory itself can be centralized or distributed; col. 1, line 65 – col. 2, line 13), wherein a first portion and a second portion of the distributed directory are located in a first partition and a second partition, respectively (If the directory is distributed ...non-overlapping subset of the information), a mechanism to enable clients to read information from a server directory while another client is attempting to update information (col. 3, lines 29-32).

12. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Meltzer and Harrison because it improves the communication in the distributed directory and clients.

13. **As to claim 19**, Meltzer teaches software for converting the directory event to a generic data description before transforming the directory event (document to host and host to document translation; col. 82, lines 26-50 and the output is converted to the XML format; col. 83, lines 41-44).

14. **As to claim 20**, Meltzer teaches an application shim for the application to receive the transformed directory event and provide the directory event to the application by using a native application program interface for the application (several different target form; col. 81, lines 24-44).

15. **As to claim 22**, Meltzer teaches (col. 82, lines 26-50) the generic transformation tool utilizes a markup language (XML document) and the software for transforming the event and the

Art Unit: 2126

application event utilizes a transformation processor (a document to host and host to document translator).

16. Claims 7, 9-11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meltzer et al. (U.S. 6,125,391) in view of Harrison et al. (U.S. 6,622,170 B1) further in view of "Official Notice".

17. **As to claim 7**, Meltzer teaches receiving a first event from an application (a market participant document is accepted at the network interface; col. 83, lines 45-47), converting the first event into XML data representing the first event (all the document received in non-XML syntaxes are translated into XML; col. 84, lines 16-33), transforming the XML data representing the first event to a first predetermined format by the transformation processor (the parsed document is translated into the format of the host), the first predetermined format being responsive to the distributed directory (the document is translated to the format of the host, for example XML to JAVA), transmitting the transformed XML data representing the first event to the distributed directory (the document is passed to the router service ... registration service; col. 83, lines 52-59), after receiving the first event from the application, receiving a second event from the distributed directory into an XML generator (registration acknowledgment ... to a document format; col. 83, lines 62-64 and document to host and host to document translation; col. 82, lines 26-57), converting the second event into XML data representing the second event (the registration acknowledgment data is converted to a document format; col. 83, lines 63-64), transforming the XML data representing the second event (translating ... host system; col. 23,

Art Unit: 2126

lines 51-63) to a second predetermined format by the transformation processor (translator module 302; col. 23, lines 51-63), the second predetermined format being responsive to an application running in the computer network (translating ... host system; col. 23, lines 51-63), transmitting the transformed XML data representing the second event to the application (commercial functions 305, database functions 306, etc.; col. 23, line 64 – col. 24, line 53), style sheet including instructions for transforming XML data to the predetermined format (XSL style sheet; col. 81, lines 24-44).

18. Although Meltzer does not explicitly teach after receiving the first event from the application, receiving a third event from the distributed directory into an XML generator, converting the third event into XML data representing the third event, transforming the XML data representing the third event to a third predetermined format by the transformation processor, the third predetermined format being responsive to an application running in the computer network, and transmitting the transformed XML data representing the third event to the application, they are inherently taught in the system of Meltzer because there are multiple market participants.

19. However, Meltzer does not teach a distributed directory, Meltzer teaches the market maker server node functions as a distributed directory (The market maker is a server ... legacy systems; col. 82, lines 58-67). Harrison teaches a distributed directory (LDAP server 20; col. 6, lines 40-58, and the directory itself can be centralized or distributed; col. 1, line 65 – col. 2, line 13), wherein a first portion and a second portion of the distributed directory are located in a first

Art Unit: 2126

partition and a second partition, respectively (If the directory is distributed ...non-overlapping subset of the information), a mechanism to enable clients to read information from a server directory while another client is attempting to update information (col. 3, lines 29-32).

20. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Meltzer and Harrison because it improves the communication in the distributed directory and clients.

21. However, Meltzer does not teach providing a first style sheet to an XSLT processor, the stylesheet including formatting instructions for transforming XML data to the first predetermined format, and providing a second stylesheet to the XSLT processor, the second stylesheet including formatting instruction for transforming XML data to the second predetermined format wherein the first stylesheet is different from the second stylesheet. "Official Notice" is taken that the art and advantage of XSLT and XSLT processor is well known and widely applied in the art, and it would have been obvious to apply the teaching to the system of Meltzer because it provides a method to convert the same data need into different representations of XML because not all companies use the exact same programs, applications and computer systems.

22. **As to claim 9**, Meltzer teaches receiving update to the first style sheet responsive to any change in either the distributed directory or the first application (the business interface ... kept up to date; col. 25, lines 34-43).

23. **As to claim 10**, Meltzer teaches the transformed XML data representing the second event is transmitted to the application through an application shim to provide the transformed XML data representing the second event to the second application by using a native application program interface for the second application (several different target form; col. 81, lines 24-44).

24. **As to claim 11**, Meltzer teaches instruction for detecting the second event through notification from an event handler of the distributed directory (event listener; col. 10, lines 46-65 and Fig. 11).

25. **As to claim 13**, Meltzer inherently teaches providing a third style sheet to the XSLT processor, the third style sheet including formatting instructions for transforming XML data to the third predetermined format.

26. Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meltzer et al. (U.S. 6,125,391) in view of Harrison et al. (U.S. 6,622,170 B1) further in view of Frank (NetWare Directory Services).

27. **As to claim 23**, see rejection of claim 18 above. However, Meltzer and Harrison do not teach software for synchronizing the first and the second partitions. Frank teaches software for synchronizing the first and the second partitions (All NDS servers be synchronized with each other ... to plot your time synchronization strategy; page 2-3, part 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of

Art Unit: 2126

Meltzer, Harrison and Frank because it provides method to synchronizing data in different server.

28. **As to claim 24**, Meltzer as modified teaches software for detecting a directory event in the distributed directory in response to receiving the application event (the router 1104, participant registry, document filter, listeners; col. 82, lines 26-50 and event listener; col. 10, lines 46-65 and Fig. 11), software for transforming the directory event to the second predetermined format using the second transformation profiled (translator 1103; col. 82, lines 51-57, the output data of the service is converted to the document format; col. 83, lines 29-44, compiler BIDC 1507; col. 84, lines 34-67), and software for providing the transformed directory event to the application (router 1104; col. 82, lines 40-57).

29. **As to claim 25**, Meltzer as modified teaches an application shim in communication with the application and the distributed directory (several different target form; col. 81, lines 24-44).

Response to Arguments

30. Applicant's arguments with respect to claims 7, 9-11, 13, 15, 18-20, and 22-25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

31. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diem K Cao whose telephone number is (703) 305-5220. The examiner can normally be reached on Monday - Thursday, 9:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703) 305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2126

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Diem Cao



MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100